

S-137-1103S

In the claims:

Please cancel claims 49, 51, 53, 55 and 57 from the April 16, 2002 Preliminary Amendment. Please cancel all other claims not set forth below.

Following is a clean copy of all pending claims, properly numbered. A marked-up copy of the claims are attached hereto showing changes made to the claims set forth in Applicant's April 16, 2002 Preliminary Amendment.

84. An isolated DNA comprising a sequence encoding a protein kinase having the amino acid sequence depicted in SEQ ID No.3, SEQ ID No. 21 or SEQ ID No. 33, or a protein having an amino acid sequence which is at least 90% similar thereto and which hybridizes under stringent washing conditions of 3x20 min in 0.5% SSC, 1% SDS at 65° C with said isolated DNA having the sequence depicted in SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 20, or SEQ ID No. 32 and encoding a protein kinase having the same activity as the sequences depicted in SEQ ID No. 3, SEQ ID No. 21, or SEQ ID No. 33.

85. The DNA according to claim 84, wherein the protein is a leucine rich repeat receptor like kinase and comprises a ligand binding domain, a proline box, a transmembrane domain, a kinase domain and a protein binding domain.

86. The DNA according to claim 84, which further encodes a cell membrane targeting sequence.

87. The DNA according to claim 84, wherein the sequence is modified in that known mRNA instability motifs or polyadenylation signals are removed or codons which are preferred by the plant into which the DNA is to be inserted are used so that expression of the thus modified DNA in the said plant yields a protein having an amino acid sequence which is at least 90% similar to the sequence of that obtained by expression of the unmodified DNA in the organism in which the protein is endogenous.

88. An expression vector containing the DNA sequence as claimed in claim 84.

S-137-1103S

89. An expression vector according to claim 88, in which the protein encoding region is under expression control of a developmentally regulated or inducible promoter.

90. An expression vector according to claim 88, wherein the promoter is one of the following: a promoter which regulates expression of SERK genes *in planta*, the carrot chitinase DcEP3-1 gene promoter, the *Arabidopsis* AtChitIV gene promoter, the *Arabidopsis* LTP-1 gene promoter, the *Arabidopsis* bel-1 gene promoter, the petunia fbp-7 gene promoter, the *Arabidopsis* ANT gene promoter, the promoter of the O126 gene from *Phalaenopsis*; the *Arabidopsis* DMC1 promoter, or the pTA7001 inducible promoter.

91. An expression vector according to claim 89, wherein the promoter is one of the following: a promoter which regulates expression of SERK genes *in planta*, the carrot chitinase DcEP3-1 gene promoter, the *Arabidopsis* AtChitIV gene promoter, the *Arabidopsis* LTP-1 gene promoter, the *Arabidopsis* bel-1 gene promoter, the petunia fbp-7 gene promoter, the *Arabidopsis* ANT gene promoter, the promoter of the O126 gene from *Phalaenopsis*; the *Arabidopsis* DMC1 promoter, or the pTA7001 inducible promoter.

92. A plant cell transformed with the vector of claim 88.

93. A plant cell transformed with the vector of claim 89.

94. Plant cell according to claim 92, which is part of a whole plant.

95. Plant cell according to claim 93, which is part of a whole plant.

96. Plants transformed with the vector of claim 88, or the seeds or progeny of such plants, wherein said seeds or progeny contain said vector of claim 88.

97. Plants transformed with the vector of claim 89, or the seeds or progeny of such plants, wherein said seeds or progeny contain said vector of claim 89.